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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/814,720	03/23/2001	Yusuke Kinoshita	205006US2	5624

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EXAMINER

RYMAN, DANIEL J

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/814,720

Applicant(s)

KINOSHITA ET AL.

Examiner

Daniel J. Ryman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-10 is/are rejected.
7) ☒ Claim(s) 7 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 30 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTQ-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/30/2005
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 11/30/2005 have been fully considered but they are not persuasive. On pages 18-19 of the Response, Applicant asserts that Inoue fails to disclose "mapping the global address to the private sender address by translation". However, Applicant acknowledges that Inoue teaches that "the H-address is replaced by the M-address" (Response: pg. 19). Applicant further acknowledges that Inoue discloses "a table with three types of addresses, including an H-address and an M-address, wherein the H-address is specific to the mobile computer in the own organization network and the M-address is an address uniquely defined over all networks" (Response: pg. 19). Newton's Telecom Dictionary defines "mapping" as "the logical association of one set of values, such as addresses on one network, with quantities or values of another set." Since Inoue discloses that the H-address and the M-address are both associated with a particular unit and thus also associated with each other, and since Inoue discloses replacing the H-address with the M-address, Inoue discloses that the M-address (global address) and the H-address (private address) are mapped to each other by translation.
2. Applicant further asserts, on page 20 of the Response, that Inoue fails to disclose "the node being currently moved". However, Examiner submits that this limitation renders the claims indefinite for the reasons given below. As such, this argument is moot.
3. Further, on page 20, Applicant asserts that "[t]he position that these teachings *could* be modified to arrive at the claimed inventions would be insufficient to establish a prima facie case of obviousness." While Examiner agrees with Applicant's assertion when taken in isolation, Examiner, respectfully, disagrees that this is what Examiner has done. Examiner does not merely

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assert that Inoue *could* be modified. Rather, Examiner outlines the reasons why it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Inoue. In response to these rejections, Applicant has failed to point out how Examiner's rationale given in the rejection of the claims is faulty. As such, Examiner maintains that these rejections are proper.

4. Finally, on page 20, Applicant asserts that Inoue fails to disclose "detecting by an address changing means in the second network that a response indicating that said node is registered has been sent from a home agent . . . to a foreign agent" (emphasis omitted). Examiner, respectfully, disagrees. Inoue teaches that the foreign agent is the device which changes the address of the packets (col. 8, lines 17-19). Inoue also discloses that the foreign agent detects if a response has been sent from a home agent to a foreign agent since the foreign agent will receive the response.

5. In view of the foregoing, Examiner maintains that the claims are anticipated or rendered obvious by the cited prior art.

Information Disclosure Statement

6. The information disclosure statement filed 11/30/2005 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. No copy of the listed document has been placed in the application file.

Claim Objections

7. Claim 7 is objected to because of the following informalities: in lines 7-9, "wherein the global address of the packet is same as the global address in the second network" should be

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“wherein the global address of the packet is unique over all of the networks” since “the global address in the second network” lacks antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 1, 6, and 10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

10. Claim 1 discloses that the private sender address is changed to a global address, even when said sending is performed in any of the different networks, which seems to imply that the change is performed every time a packet is sent. However, the specification discloses that the private sender address is only changed to a global address when the packet is destined for a node located outside of the private network (Fig. 6 and specification: page 14). According to the specification, the purpose of the invention is to have the same translation performed at NATs located in either the home or the foreign network, not to perform a translation every time a packet is sent. Thus, Examiner will interpret “changing the private sender address to a global address, even when said sending is performed in any of the different networks” as “changing the private sender address to a global address, even when said changing is performed in any of the different networks”.

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11. Claim 6 discloses that an address translation request is added to a translation request. In the specification an address translation request is added to a registration request (Specification: pg. 23). Since Applicant amended claim 6 to change “registration request” to “translation request”, Examiner will not examine claim 6 for the purposes of prior art rejections, but rather Examiner will rely on the rejection in the previous Office Action to demonstrate the state of the art to Applicant.

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 2-6 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

14. Claims 2 and 9 discloses the following limitations: in lines 1-3 of claims 2 and 8, “a node . . . being moved from a first network including said node” and, in lines 7-8 of claims 2 and 8, “the node being currently moved into said second network”. It is unclear from the claim whether the node is located in the first network, the second network, or a network in-between the first and second network. It is also unclear what constitutes a node “currently being moved.” Does the node have to be in motion between the networks? If not, how does one distinguish between a node in the first or second network and another node in the first or second network that is “currently being moved into the second network”? For the purpose of prior art rejections, Examiner will interpret “the node being currently moved into said second network” as “the node having been moved into the second network”.

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

16. Claims 1-4, 7, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Inoue et al. (USPN 6,442,616), previously presented.

17. Regarding claim 1, Inoue discloses a method for packet communication comprising: sending a packet, by a node configured to be moved among different networks (ref. 21), the packet including a private sender address (home address, H-addr) (col. 5, lines 53-67 and col. 11, line 58-col. 12, line 5); changing the private sender address to a global address (mobile address, M-addr), even when said changing is performed in any of the different networks, by mapping the global address to the private sender address by translation (col. 5, lines 53-67 and col. 11, line 58-col. 12, line 5).

18. Regarding claim 2, Inoue discloses a method for packet communication wherein a node includes a private sender address (home address, H-addr) being moved from a first network (ref. 41: own organization network) including said node, and first address changing means (packet processing device) for receiving a packet from said node and then changing said private sender address of the packet to a global address (mobile address, M-addr) for outputting into a second network (external organization network) being different from said first network (col. 3, line 3-col. 4, line 33 and col. 5, line 50-col. 7, line 6), the method comprising: receiving said packet

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from said node by the first address changing (packet processing device) means, the node having been moved into said second network (col. 5, lines 53-67 and col. 11, line 58-col. 12, line 5); changing said private sender address of said received packet by the first address changing means from said private sender address (H-addr) to the global address (M-addr), the changing performed by mapping the global address to the private sender address by translation (col. 5, lines 53-67 and col. 11, line 58-col. 12, line 5); and sending said packet by the first address changing means to a third network (network on which correspondence host, CH, is located) different from said first and second networks after said changing said sender address (col. 5, lines 53-67 and col. 11, line 58-col. 12, line 5).

19. Regarding claim 3, Inoue discloses in one embodiment, when the node has moved into the second network, registering the node in a home agent, the home agent configured to manage the first network (col. 7, line 61-col. 8, line 19) where it is implicit that the HA manages the first network; registering the node in a foreign agent, the foreign agent configured to manage the second network (col. 7, lines 30-56) where it is implicit that the FA manages the second network; and notifying the node by the first address changing means of a correspondence between said private sender address and said global address periodically after said registering the node in the home agent and in the foreign agent (col. 8, lines 20-51 and col. 13, line 54-col. 14, line 25).

20. Regarding claim 4, Inoue discloses in one embodiment detecting by a second address changing means of the second network that a registration request is sent from said node moved into said second network to a foreign agent configured to manage said second network (col. 7, lines 30-56) where the FA performs the address change; and requesting by the second address changing means of the second network that the first address changing means in the first network

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transmits to the second address changing means of the second network a correspondence between the global address mapped to the private sender address, after said detecting (col. 13, line 54-col. 14, line 25, esp. col. 14, lines 22-25).

21. Regarding claim 7, Inoue discloses a method for packet communication, comprising: outputting a packet in a first network, the packet including a private sender address (H-addr) to changing means (packet processing device) configured to change the address of the packet from the private sender address to a global address (M-addr) by mapping the global address to the private sender address by translation (col. 3, line 3-col. 4, line 33; col. 5, line 50-col. 7, line 6; and col. 11, line 58-col. 12, line 5); and sending the packet to a second network, wherein the global address of the packet is same as the global address in the second network (col. 3, line 3-col. 4, line 33; col. 5, line 50-col. 7, line 6; and col. 11, line 58-col. 12, line 5).

22. Regarding claim 10, Inoue discloses that the changing the sender address is performed while the node is moved among different networks (col. 7, lines 15-59).

Claim Rejections - 35 USC § 103

23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

24. Claims 5, 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al. (USPN 6,442,616), previously presented.

25. Regarding claim 5, Inoue does not expressly disclose detecting by a second address changing means in the second network that a response indicating that said node is registered has

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been sent from a home agent configured to manage said first network to a foreign agent configured to manage said second network; and requesting by the second address changing means in the second network that the first address changing means in the first network sends to the second address changing means of the second network the global address mapped to the private sender address, after the detecting. However, Inoue does disclose detecting at an address changing means in the second network that a registration message sent from a mobile node to register in a foreign network has been sent and after the detection, requesting, by the address changing means of the second network, that said address changing means in said first network send the address changing means of the second network said global address mapped to said private address in order to ensure that all devices on the network use the same network translation tables (col. 13, line 54-col. 14, line 7). Inoue also discloses sending from a home agent to a foreign agent a response indicating that said node is registered in order to inform the foreign network whether or not the registration has been successful (col. 7, line 60-col. 8, line 19, esp. col. 8, lines 4-10). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to detect by a second address changing means in the second network that a response indicating that said node is registered has been sent from a home agent configured to manage said first network to a foreign agent configured to manage said second network; and to request by the second address changing means in the second network that the first address changing means in the first network send to the second address changing means of the second network the global address mapped to the private sender address, after the detecting in order to request the address correspondence information only if the registration has been successful.

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26. Regarding claim 8, incorporating the rejection of claims 1 and 2, Inoue discloses each limitation of claim 8, as outlined in the rejection of claims 1 and 2, except receiving a packet including a second global address, different from said first global address, from a second node which has been moved into said first network from the second network which is different from said first network; and sending said packet to the third network without changing an address of said packet received from said second node from said second global address to said first global address. However, Inoue does disclose using address translation to ensure that the private addresses used in the first network are replaced with globally unique addresses when a packet is transmitted from the first network to the globally addressed second network (col. 3, line 3-col. 4, line 33; col. 5, line 50-col. 7, line 6; and col. 11, line 58-col. 12, line 5). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention, when receiving a packet including a second global address, which is different from said first global address as a sender address, from a second node which has been moved into said first network from said second network which is different than the first network, to send said packet to the third network without changing a sender address of said packet received from said second node from said second global address to said first global address since the packet already contains a globally unique address and thus does not require an address translation to obtain a globally unique address.

27. Regarding claim 9, incorporating the rejection of claim 2, Inoue discloses all of the limitations of claim 9, as outlined in the rejection of claim 2, except that the method is implemented using a computer program stored in a computer-readable medium. Examiner takes official notice that it is well known in the art to use software to implement a method since software is very flexible. Thus, it would have been obvious to one of ordinary skill in the art at

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the time of the invention to use computer code to implement the method since software is very flexible.

Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Millet et al. (USPN 6,434,627) see entire document which pertains to using address translation to implement mobile IP networks. Inoue et al. (USPN 6,515,974) see entire document which pertains to using address translation to implement mobile IP networks. Inoue et al. (USPN 6,501,767) see entire document which pertains to using address translation to implement mobile IP networks. Redlich (USPN 6,591,306) see entire document which pertains to using address translation to implement mobile IP networks.

29. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (571)272-3152. The examiner can normally be reached on Mon.-Fri. 7:00-4:30 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DJR
Daniel J. Ryman
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Art Unit 2665


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